

Mologen Pain combating agent.ST25  
SEQUENCE LISTING

<110> WITTIG, Burghardt  
STEIN, Christoph  
SCHÄFER, Michael  
SCHROFF, Matthias  
JUNGHANS, Claas  
KÖNIG MEREDIZ, Sven A.

<120> Local Pain-Combating Agent

<130> NHL-NP-43

<150> DE 101 09 092.7

<151> 2001-02-24

<150> PCT/DE02/00583

<151> 2002-02-19

<160> 10

<170> PatentIn version 3.1

<210> 1

<211> 535

<212> DNA

<213> synthetic sequence

<220>

<221> Intron

<222> (446)..(532)

<223>  $\beta$ -endorphin cDNA sequence

<220>

<221> Intron

<222> (446)..(532)

<223>  $\beta$ -endorphin cDNA sequence

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gcttcagacc tccatagacg tgtggagctg gtgcctggag agcagccagt gccaggacct	180
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gacgcccgtg tttccaggca acggagatga acagcccttg actgaaaatc cccggaagta	300
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ctcagcgcag aggcgtgcgg aggaagagac ggcgggggga gatggccgtc cggagccaag	420
tccacgggag ggcaagcgct acggcggtt catgacctcc gagaagagcc agacgccct	480
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<210> 2

<211> 663

<212> DNA

## Mologen Pain combating agent.ST25

&lt;213&gt; synthetic sequence

&lt;220&gt;

&lt;221&gt; Intron

&lt;222&gt; (376)..(462)

<223>  $\beta$ -endorphin cDNA sequence

&lt;220&gt;

&lt;221&gt; Intron

&lt;222&gt; (475)..(562)

<223> second  $\beta$ -endorphin cDNA sequence

&lt;220&gt;

&lt;221&gt; Intron

&lt;222&gt; (574)..(660)

<223> third  $\beta$ -endorphin cDNA sequence

&lt;400&gt; 2

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agcaacctgc tggcttgcat ccgggcctgc agactcgacc tctcggcgga gacgcccgtg      180
tttccaggca acggagatga acagcccttg actgaaaatc cccggaagta cgtcatgggt      240
cacttccgct gggaccgctt cgccccgaga aacagcagca gtgctggcgg ctacgcgcag      300
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ggcaagcgct acggcggtt catgacctcc gagaagagcc agacgccctt ggtgacgctc      420
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atgacctccg agaagagcca gacgccctg gtgacgtctt tcaagaacgc catcatcaag      540
aacgtgcaca agaagggcc gaagcgctac ggcgggttca tgacctccga gaagagccag      600
acgccccctg tgacgtctt caagaacgcc atcatcaaga acgtgcacaa gaagggccag      660
tga                                                                 663

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&lt;210&gt; 3

&lt;211&gt; 708

&lt;212&gt; DNA

&lt;213&gt; Rat

&lt;400&gt; 3

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agcaacctgc tggcttgcat ccgggcctgc agactcgacc tctcggcgga gacgcccgtg      180
tttccaggca acggagatga acagcccttg actgaaaatc cccggaagta cgtcatgggt      240
cacttccgct gggaccgctt cgccccgaga aacagcagca gtgctggcgg ctacgcgcag      300
aggcgtgcgg aggaagagac ggcgggggga gatggccgtc cggagccaag tccacgggag      360

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ggcaagcgct cctactccat ggagcacttc cgctggggca agccggtggg caagaagcgg 420
cgccctgtga aggtgtaccc caatgtcgcc gagaacgagt cggccgaggg ctttccccta 480
gagttcaaga gggagctgga aggcgagcag cctgatggct tggagcacgt cctggagccg 540
gataccgaga aggccgacgg gccctatcgg gtggagcact tccgctgggg caacccgccc 600
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ctcttcaaga acgcatcat caagaacgtg cacaagaagg gccagtga 708

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 <212> DNA  
 <213> synthetic sequence

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agcaacctgc tggcttgcac ccgggcctgc agactcgacc tctcggcgga gacgcccgtg 180
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aggcgtgcgg aggaagagac ggcgggggga gatggccgtc cggagccaag tccacgggag 360
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gagttcaaga gggagctgga aggcgagcag cctgatggct tggagcacgt cctggagccg 540
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aaggacaagc gctga 615

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<210> 5  
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 <212> PRT  
 <213> Simian virus 40

<400> 5

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<210> 6  
 <211> 1195  
 <212> DNA  
 <213> Rattus norvegicus

<220>  
 <221> misc\_feature  
 <223> CRF cDNA sequence

## Mologen Pain combating agent.ST25

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<400> 6
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gaacaacagt gcgggctcac ctgccaaagg aggagaagag agcgcccccta aacatgcggc      180
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tcttgcaacc ggagcagccc cagcaacctc agccgattct gatccgcatt ggtgaagaat      360
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cgccccctcac cgcgggctcg ggcagccgcc cctcgcacga ccaggctgcg gctaactttt      480
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agattatcgg gaaatgaaat gttgcgcttg gccaaaacga ttctgcattt agcacacaag      780
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aattagcatg cacaaagtgt gtttctttgt agtaacaaaa cagcgttatt tgtattgttc      960
acgcttagtt tctatgtgca aataagtgtc tttatagcga tatcttaaag aaaatgtgga     1020
tccaaggagg aaacctttta aaaagcagat ggaagtcacc cagttgtttt tatttgagga     1080
cacagtgtaa gagaattcat tcttgagggg tggctaggac aaaatgtgta agctctttga     1140
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<210> 7
<211> 564
<212> DNA
<213> Rattus norvegicus

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<220>
<221> Intron
<222> (376)..(462)
<223>  $\beta$ -endorphin cDNA sequence

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<220>
<221> Intron
<222> (376)..(462)
<223> first  $\beta$ -endorphin cDNA sequence

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<220>
<221> Intron
<222> (475)..(562)

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## Mologen Pain combating agent.ST25

<223> second  $\beta$ -endorphin cDNA sequence

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<400> 7
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agcaacctgc tggcttgcac ccgggcctgc agactcgacc tctcggcgga gacgcccgtg      180
tttcaggca acggagatga acagcccttg actgaaaatc cccggaagta cgtcatgggt      240
cacttccgct gggaccgctt cggcccgaga aacagcagca gtgctggcgg ctcagcgag      300
aggcgtgcgg aggaagagac ggcgggggga gatggccgtc cggagccaag tccacgggag      360
ggcaagcgtc acggcggtt catgacctcc gagaagagcc agacggccct ggtgacgtc      420
ttcaagaacg ccatcatcaa gaactgcac aagaagggcc agaagcgcta cggcggttc      480
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aacgtgcaca agaaggcca gtga                                          564

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<210> 8
<211> 936
<212> DNA
<213> Homo sapiens

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<220>
<221> Intron
<222> (847)..(933)
<223>  $\beta$ -endorphin cDNA sequence

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agcaacctgc tgaaggggat gggacaaaag aggcggtggc aagatcttag atgccacga      180
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aagagggagc tgactggcca gcgactccgg gagggagatg gccccgacgg ccctgccgat      720
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Mologen Pain combating agent.ST25  
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gccatcatca agaacgccta caagaagggc gagtga 936

<210> 9  
<211> 87  
<212> DNA  
<213> Rattus norvegicus

<220>  
<221> misc\_feature  
<223> 3'-end sequence

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atcaagaacg tgcacaagaa gggccag 87

<210> 10  
<211> 87  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<223> 3'-end sequence

<400> 10  
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atcaagaacg cctacaagaa gggcgag 87